

ESTIMATE

Name of the Work :		Construction of RCC Pillars for the Demarcation of Surveyd Boundary of "Protected Forest" during the year 2026-27										
Name of the Forest:		Ankaravalli MF					Legal Status:		Protected Forest			
Budget Head:		4406-01-101-0-01-132 (D&P)										
Location:		Ankaravalli MF			RFO Unit :		6		Estimated Amount:		177000.00	
Range:		Soraba			Subdivision:		Soraba		Division:		Sagara	
District:		Shivamogga			Taluk:		Soraba		LA Constituency:		Soraba	
GPS Reading:		N 14.496517 E75.163630			No. of Boundary Marks:				D Line in Kms:		5.00	
Rate :		As per PWD CSR 2023-24										
Specification:		As per OM issued by the O/o The PCCF(HOFF), Bangalore vide OM No:KFD/WP/A1(BUD)/5/2024 Dated:22.07.2024 & KFD/DEV/B1/SSR/1/2026-DEV-KFD E-2185876 Dated: 01.04.2026										
Sl. No	Particulars	Unit	Box	No	L	B	D	Qty/Unit	Rate in Rs.	Amount in Rs.		
1	2	3	4	5	6	7	8	9	10	11		
PART-A												
1	1.5 Earth work excavation by manual means for drains, canals, waste weir draft, approach channels. key trench, foundation of Bridges and such similar works, as per drawing and technical specifications including setting out, shoring, strutting, barricading, caution lights, excavated surface leveled and sides neatlydressed disposing off or leveling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work. In ordinary/soft rock without blasting upto 1.5 m depth. (PWD Schedule of Rates 2023-2024 Vol No.1, Page No:6, Item No:1.5.1)											
Pit			1	x	0.80	x	0.80	x	0.6		= 0.384	
	cum	1									0.384	
	Nos		20								7.680	
									Cum	334.88	2572.00	
Basic Rate	AW @ 12%		Total									
299.00	35.88		334.88									
2	2.1.3 Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates. (PWD Common SR 2023-24Vol-1 Pg.No.15 It.No.2.1.3)											
Bed			1	x	0.80	x	0.80	x	0.075		= 0.048	
	cum	1									0.048	
	Nos		20								0.960	
									Cum	6707.68	6439.00	
Basic Rate	AW @ 12%		Total									

Sl. N	Particulars	Unit	Box	No	L	B	D	Qty/Unit	Rate in Rs.	Amount in Rs.					
1	2	3	4	5	6	7	8	9	10	11					
	5918.00	710.16		6628.16											
3	2.2.1. Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates. (PWD Schedule of Rates 2023-2024 Vol No.1, Page No:15, Item No:2.2.1)														
	Footing			1	x	0.50	x	0.50	x	0.575	=	0.14375			
		cum	1									0.14375			
		Nos		20								2.87500	cum	7323.10	21054.00
	Basic Rate	Scaffolding @4%			Total	AW @ 12%		Total							
	6184.00	251.48			6435.48	784.6176		7220.10							
4	2.4.2 Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20Design Mix Using 20 mm nominal size graded crushed coarse aggregates. (PWD Schedule of Rates 2023-2024 Vol No.1, Page No:16, Item No:2.4.2)														
	Column			1	x	$\frac{(0.35+0.25)}{2}$	x	$\frac{(0.35+0.25)}{2}$	x	1	=	0.09000			
	Cap			1/3		0.25	x	0.25	x	0.05		0.00104			
		cum	1									0.09104			
		Nos		20								1.82083	cum	7789.94	14184.00
	Basic Rate	Scaffolding @10%			Total	AW @ 12%		Total							
	6221.00	622.1			6843.10	821.172		7664.27							
5	2.11 Steel Fabrication Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancillary operations complete as per drawing and technical specification. (PWD Schedule of Rates 2023-2024 Vol No.1 Page No:18, Item No: 2.11h)														
Calculation Sheet for Steel										Calculation Sheet for Rings (RMTR)					
Calculation Sheet for Pillar	a) 10mm dia vertical bars		4	Nos.	Total length from Top to Bottom + Bent			Details	Particular	Nos.	RMTR				
				=	1.6 + 0.08			8 mm dia meter 130 mm c/c bars 12 nos.	12 Rings from bottom to top	Ring No 1	1.4000				
				=	1.68 RMTR					Ring No 2	1.3440				
				=	4 X 1.68 =6.72 RMTR					Ring No 3	1.2880				
				=	6.72 X 0.62 kg/m					Ring No 4	1.2360				
	Total			=	4.17 kg					Ring No 5	1.1800				
	b) 8 mm dia Rings		12	Nos.	Total RMTR of 12 Rings + Bent for Rings					Ring No 6	1.1280				
				=	13.192 + 0.768					Ring No 7	1.0720				
				=	13.96 RMTR					Ring No 8	1.0160				
				=	13.96 X 0.39 kg/m					Ring No 9	0.9640				
	Total			=	5.44 kg					Ring No 10	0.9080				
	Grand Total (a+b)			=	9.61 Kg	tonne	0.00961			Ring No 11	0.8560				
										Ring No 12	0.8000				
							Total			13.1920					
Pillar	tonne		1					0.00961							
	Nos		20					0.19220	tonne	89621.28	17225.00				
Basic Rate	AW @ 12%			Total											
80019.00	9602.28			89621.28											

2.11 Steel Fabrication Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancillary operations complete as per drawing and technical specification.
(PWD Schedule of Rates 2023-2024 Vol No.1 Page No:18, Item No: 2.11h)

12.3A Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth. Compacting each deposited layer by ramming after watering with a lead upto 50m, and lift upto 1.5m including cost of all labour complete as per specifications.
(PWD Schedule of Rates 2023-2024 Vol No.I, Page No:7, Item No:1.10)

8.10 Providing 6 mm cement plaster with cement mortar 1:3 (1 cement: 3 fine sand) on concrete surface/cellings including rounding off corners wherever required smooth rendering. Providing and removing scaffolding. Including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. (PWD Schedule of Rates 2023-2024 Vol No.2, Page No:43, Item No:8.10)

[illegible]

Sl. N	Particulars	Unit	Box	No	L	B	D	Qty/Unit	Rate in Rs.	Amount in Rs.
1	2	3	4	5	6	7	8	9	10	11
9	8.29 Finishing walls with textured exterior paint of required shade :New work (Two coats applied @ 3.28 ltr/10 m²) over and including priming coat of exterior primer applied @ 2.20kg/10 m² to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (PWD Schedule of Rates 2023-2024 Vol No.2, Page No:45, Item No:8.29)									
	Dimensions as per item - no.8							1.49500		
	sqm	1						1.49500		
	Nos		20					29.90000	sqm	316.96
	Basic Rate	AW @ 12%		Total						
	283.00	33.96		316.96						
10	8.49 Lettering with black/red Japan paint of approved brand and manufacture to give an even shade including preparing the surface after thoroughly cleaning the surface to remove all dirt, dust and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge. (PWD Schedule of Rates 2023-2024 Vol No.2, Page No:49, Item No:8.49)									
	per letter per cm height									
	cm	2			250.00			500.000		
	Nos		20					10000.000	cm	4.48
	Basic Rate	AW @ 12%		Total						
	4.00	0.48		4.48						
	Sub Total									135345.00
11	Add GST Charges 18%									24362.00
12	Miscellaneous and Unforeseen Charges									3880.00
	Total Amount									163587.00
PART-B										
13	Documentation and Other Charges									13413.00
	Grand Total Amount									177000.00

Amount Rs. 177000.00 (One Lakh Seventy Seven Thousand Only)


CERTIFICATE:

1. Certified that the work /amount claimed in this estimate has not been claimed in any of the previous decade (10 Years) estimates and the same work is found essential in the interest of government.
2. The above works are to be included in the Sanctioned APO for the year 2026-27
3. The above rates are claimed as per the PWD CSR for the year 2023-24
4. The Estimate for similar structure has been technically scrutinized by the competent authority i.e., ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ, ಶಿವಮೊಗ್ಗ, ಇವರ ಪತ್ರ ಸಂಖ್ಯೆ: ಸಕಾಇಂ/ಲೋಇ/ನಂ-1/ಉವಿಶಿ/ಡಿ.ಎಂ/ತಾಂ.ಪ/195/2026-27 ದಿನಾಂಕ:20.05.2026 ರಂತೆ

Technically Scrutinized for Rs: 177000.00 (One Lakh Seventy Seven Thousand Only)

(Maliyappa S Hullatti)
Range Forest Officer, Unit-06
Working Plan & Survey, Shivamogga.

(Gnanananda S.)
Assistant Conservator of Forests,
Working Plan and Survey, Shivamogga.

4406-01-101-0-01-132	
BUDGET HEAD : Other Capital Expenses (D&P)	
S.O. No	138/2026-27 Date : 05/06/2026
Sanctioned for Rupees	177000/- [One lakh Seventy Seven thousand only]
 Deputy Conservator of Forests and Technical Assistant to Conservator of Forests Working Plan and Survey, Shivamogga.	